

I claim:

- 1           1.       A method for adapting the polling rate for collecting job information  
2 from a device, the method comprising the steps of:  
3           querying a device for job information;  
4           determining a state of job progress from the job information;  
5           setting a delay time depending upon the state of job progress; and  
6           querying the device for job information after the delay time has passed.
- 1           2.       The method for adapting the polling rate for collecting job information  
2 from a device of claim 1, wherein an application-layer protocol is employed to poll the  
3 device.
- 1           3.       The method for adapting the polling rate for collecting job information  
2 from a device of claim 1, wherein a network management protocol request is  
3 employed to poll the device.
- 1           4.       The method for adapting the polling rate for collecting job information  
2 from a device of claim 1, wherein a Simple Network Management Protocol (SNMP)-  
3 enabled application is employed to poll the device.
- 1           5.       The method for adapting the polling rate for collecting job information  
2 from a device of claim 1, wherein the device is a network-connected device.
- 1           6.       The method for adapting the polling rate for collecting job information  
2 from a device of claim 1, wherein the device is a printer.
- 1           7.       The method for adapting the polling rate for collecting job information  
2 from a device of claim 1, wherein the job information comprises print job information.
- 1           8.       The method for adapting the polling rate for collecting job information  
2 from a device of claim 1, wherein the delay time is set to be no less than an acceptable  
3 delay time.

1           9.     The method for adapting the polling rate for collecting job information  
2 from a device of claim 1, wherein the step of setting a delay time includes the steps of:  
3           adjusting an expected job completion time depending upon the state of job  
4 progress; and  
5           determining the delay time from the expected job completion time.

1           10.    The method for adapting the polling rate for collecting job information  
2 from a device of claim 9, wherein the delay time is set to be less than the expected job  
3 completion time.

1           11.    The method for adapting the polling rate for collecting job information  
2 from a device of claim 9, wherein the delay time is set to be approximately one half of  
3 the expected job completion time.

1           12.    The method for adapting the polling rate for collecting job information  
2 from a device of claim 9, wherein the delay time is set to be within a range of values  
3 bounded by a minimum delay time and a maximum delay time.

1           13.    A method for adapting the polling rate for collecting job information  
2 from a device, the method comprising the steps of:  
3           querying a device for information;  
4           determining an expected job completion time from the information;  
5           setting a delay time depending upon the expected job completion time; and  
6           querying the device for job information after the delay time has passed.

1           14.    The method for adapting the polling rate for collecting job information  
2 from a device of claim 13, wherein the information comprises a rated speed of the  
3 device.

1           15.    The method for adapting the polling rate for collecting job information  
2 from a device of claim 14, wherein the rated speed is a rated engine speed.

1           16.    The method for adapting the polling rate for collecting job information  
2   from a device of claim 14, wherein the rated speed is a rated print speed.

1           17.    The method for adapting the polling rate for collecting job information  
2   from a device of claim 13, wherein the expected job completion time is a best case job  
3   completion time.

1           18.    A method for adapting the polling rate for collecting job information  
2   from a device, the method comprising the steps of:

3           (a) querying a device for device and/or job information according to a polling  
4   rate;

5           (b) adjusting the polling rate depending upon the device and/or job  
6   information; and

7           (c) repeating steps (a) and (b) until a job associated with the device and/or job  
8   information is completed.

1           19.    The method for adapting the polling rate for collecting job information  
2   from a device of claim 18, wherein the polling rate is adjusted such that a delay time  
3   until a next query to the device is no less than an acceptable delay time.

1           20.    The method for adapting the polling rate for collecting job information  
2   from a device of claim 18, wherein the polling rate is adjusted such that a delay time  
3   until a next query to the device is set to be within a range of values bounded by a  
4   minimum delay time and a maximum delay time.

1           21.    The method for adapting the polling rate for collecting job information  
2   from a device of claim 18, wherein the device information comprises a function  
3   performance rating.

1           22.    The method for adapting the polling rate for collecting job information  
2   from a device of claim 21, wherein the function performance rating is a printing speed  
3   rating.

1           23.    The method for adapting the polling rate for collecting job information  
2 from a device of claim 18, wherein the job information comprises job progress  
3 information.

1           24.    The method for adapting the polling rate for collecting job information  
2 from a device of claim 23, wherein the job progress information comprises print job  
3 progress information.

1           25.    The method for adapting the polling rate for collecting job information  
2 from a device of claim 18, wherein the job information comprises print job  
3 information.

1           26.    A computer program for adapting the polling rate for collecting job  
2 information from a device comprising:  
3           a computer usable medium having computer-readable instructions thereon for  
4 causing a computer to query a device for job information, determine a state of job  
5 progress from the job information, set a delay time depending upon the state of job  
6 progress, and query the device for job information after the delay time has passed.

1           27.    A processing system for adapting the polling rate for collecting job  
2 information from a device comprising:  
3           a monitoring agent configured to query a device for job information,  
4 determine a state of job progress from the job information, set a delay time depending  
5 upon the state of job progress, and query the device for job information after the delay  
6 time has passed.